

**SYSTEM AND METHOD FOR EFFICIENT SIMULATION OF REFLECTOMETRY
RESPONSE FROM TWO-DIMENSIONAL GRATING STRUCTURES**

ABSTRACT OF THE DISCLOSURE

[0064] The present invention relates to an efficient method for accurately simulating the integrated reflectometry response from two-dimensional grating structures using a few points. First, a first and a second point are determined within an aperture located in an optical system. Next, the reflectance response of light incident at the first point and the second point are simulated. The approximated integrated reflectance response of the aperture is then determined based on the reflectance response at the first point and the second point and the weighted average of the reflectance response at the first point and the second point.